

# **PCT**

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference UPNA-0006	FOR FURTHER ACTION	1	cation of Transmittal of International Search form PCT/ISA/220) as well as, where applicable, low.
International application No. PCT/US03/16086	International filing date (day/mor 21 May 2003 (21.05.2003)	nth/year)	(Earliest) Priority Date (day/month/year) 10 September 2002 (10.09.2002)
Applicant THE TRUSTEES OF THE UNIVER	SITY OF PENNSYLVANIA		
according to Article 18. A copy is  This international search report con	being transmitted to the International	Bureau.	uthority and is transmitted to the applicant in this report.
	age, the international search was carried filed, unless otherwise indicated under		basis of the international application in the
Authority (Rule 23.1(b) b. With regard to any nucle	o)).		international application furnished to this international application, the international
contained in the interna	ational application in written form.		
filed together with the	international application in computer re-	dable form	<b>.</b>
furnished subsequently	to this Authority in written form.		. (4)
furnished subsequently	to this Authority in computer readable	form.	
-	subsequently furnished written sequence on as filed has been furnished.	listing does	not go beyond the disclosure in the
the statement that the in been furnished.	nformation recorded in computer readab	le form is i	dentical to the written sequence listing has
2. Certain claims were f	ound unsearchable (See Box I).		
3. Unity of invention is l	lacking (See Box II).	•	
4. With regard to the title,	•	•	
the text is approved as	submitted by the applicant.		
the text has been estable	lished by this Authority to read as follow	vs:	
5. With regard to the abstract,	·		
the text is approved as	submitted by the applicant.		
	- · · · · · · · · · · · · · · · · · · ·		as it appears in Box III. The applicant may, ort, submit comments to this Authority.
6. The figure of the drawings to be as suggested by the app	pe published with the abstract is Figure in plicant.	No. <u>2</u>	None of the figures
because the applicant f	ailed to suggest a figure.		
because this figure bett	ter characterizes the invention.		





## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/16086

A. CLASSIFICATION OF SUBJECT MATTER  IPC(7) : B29C 71/00  US CL : 264/184, 185, 221, 235  US CL : 264/184, 185, 221, 235							
According to International Patent Classification (IPC) or to both national classification and IPC  B. FIELDS SEARCHED							
		v classification symbols)					
Minimum documentation searched (classification system followed by classification symbols) U.S.: 264/184, 185, 221, 235							
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched None							
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet							
C. DOC	UMENTS CONSIDERED TO BE RELEVANT						
Category *	Citation of document, with indication, where ap		Rélévant to claim No.				
, <b>X</b>	US 2002/0113335 A1 (LOBOVSKY et al) 22 August 5, lines 1-40; page 7, line 10 to page 9, line 40.	2002 (22.08.2002), See Abstract; page	1-139				
<b>A</b>	US 2002/0085968 A1 (SMALLEY et al) 04 July 200	1-139					
<b>A</b> 	US 2002/0090331 A1 (SMALLEY et al) 11 July 200	1-139					
,							
	¥ .						
	·						
	,						
	W.						
		·	·				
	·						
			1))				
	d)						
	·	•					
	documents are listed in the continuation of Box C.	See patent family annex.  "T" later document published after the inte					
	special categories of cited documents:	date and not in conflict with the applic	ation but cited to understand the				
"A" document	t defining the general state of the art which is not considered to be	principle or theory underlying the inve					
	oplication or patent published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be conside when the document is taken alone	claimed invention cannot be red to involve an inventive step				
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"Y" document of particular relevance; the claimed invention can considered to involve an inventive step when the document is combined with one or more other such documents, such con					
"O" documen	at referring to an oral disclosure, use, exhibition or other means	combined with one or more other such being obvious to a person skilled in th	e art				
"P" documen	t published prior to the international filing date but later than the	"&" document member of the same patent	family				
Date of the a	Date of the actual completion of the international search  Date of mailing of the international search report  1 067 2003						
	r 2003 (30.09.2003)	01 0M: -1					
	ame and mailing address of the ISA/US						
	Mail Stop PCT, Attn: ISA/US Commissioner for Patents						
P.C	). Box 1450	Telephone No. (703) 308-0661					
1	Alexandria, Virginia 22313-1450  acsimile No. (703)305-3230						

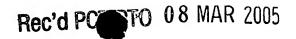


### INTERNATIONAL SEARCH REPORT

PCT/US03/16086

Continuation of B. FIELDS SEARCHED Item 3: WEST search terms:

carbon, nanotube, surfactant



#### INTERNATIONAL SEARCH REPORT

International application No.

			FC1/0303/10000	i.
	SIFICATION OF SUBJECT MATTER			
IPC(7) US CL	: B29C 71/00			
	: 264/184, 185, 221, 235 International Patent Classification (IPC) or to both nati	onal classification an	4 IDC	
	DS SEARCHED	Char Classification an	u II C	
Minimum doc	cumentation searched (classification system followed by	classification sumbo	alc)	
	54/184, 185, 221, 235	ciassification symbol	ns)	
Dogumantatio	on searched other than minimum documentation to the e			
None	in searched other than infillinglin documentation to the e	extent that such docum	nents are included in	the fields searched
		•		
Electronic dat	ta base consulted during the international search (name	of data base and, wh	ere practicable, sear	ch terms used)
Please See Co	ontinuation Sheet			
	UMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where ap			Relevant to claim No.
x	US 2002/0113335 A1 (LOBOVSKY et al) 22 August	2002 (22.08.2002),	See Abstract; page	1-139
A	5, lines 1-40; page 7, line 10 to page 9, line 40. US 2002/0085968 A1 (SMALLEY et al) 04 July 2003	7 (04 07 2002) Coo	A bosesses	1 120
A	03 2002/0003308 AT (SWIALLET & al) 04 July 200.	z (04.0 <i>1.2</i> 002), See .	Aostract.	1-139
A	US 2002/0090331 A1 (SMALLEY et al) 11 July 200	2 (11.07.2002), See	Abstract.	1-139
	•	, ,		
			,	
				}
				,
i				
Further	r documents are listed in the continuation of Box C.	See paten	t family annex.	
	Special categories of cited documents:			ernational filing date or priority
	at defining the general state of the art which is not considered to be	date and no	a in conflict with the applic	cation but cited to understand the
	ular relevance		r theory underlying the inv	enuon
"E" earlier ag	pplication or patent published on or after the international filing date			claimed invention cannot be red to involve an inventive step
			ocument is taken alone	red to involve an invenive step
establish	nt which may throw doubts on priority claim(s) or which is cited to the publication date of another citation or other special reason (as	"Y" document	of particular relevance: the	claimed invention cannot be
specified	1)		to involve an inventive ste	p when the document is h documents, such combination
"O" documen	nt referring to an oral disclosure, use, exhibition or other means		ous to a person skilled in the	
"P" documen	u published prior to the international filing date but later than the	"&" document	member of the same patent	family
priority (	date claimed		parent	
Date of the	actual completion of the international search	Date of mailing of	the international seas	rch report
30 September	er 2003 (30.09.2003)	b 1 GCT	<sup>-</sup> 2003	
Name and m	nailing address of the ISA/US	Authorized offider	-+	<u> </u>
Ma	ail Stop PCT, Attn: ISA/US	MARINE	w ,	
	Ommissioner for Patents O. Box 1450	wogenara Gupta	PSV	
Ale	exandria, Virginia 22313-1450	Telephone No. (7	03) 308-0661	
Facsimile No. (703)305-3230				
Form PCT/IS	A/210 (second sheet) (July 1998)			

INTERNATIONAL SEARC	H REPORT	PCT/US03/16086	
Continuation of B. FIELDS SEARCHED Ite	em 3:		
WEST search terms: carbon, nanotube, surfactant			

Form PCT/ISA/210 (second sheet) (July 1998)